```
L16 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:659366 HCAPLUS
DOCUMENT NUMBER:
                        131:267946
                        Amidine-containing lipopolyamines, their synthesis and
TITLE:
                        use in transfection
                         Byk, Gerardo; Frederic, Marc; Hofland, Hans;
INVENTOR(S):
                         Schermann, Daniel
PATENT ASSIGNEE(S):
                         Rhone-Poulenc Rorer S.A., Fr.
SOURCE:
                         PCT Int. Appl., 83 pp.
                         CODEN: PIXXD2
                                                      Turntors
DOCUMENT TYPE:
                         Patent
                         French
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                         APPLICATION NO. DATE
                    KIND DATE
     PATENT NO.
    WO 9951581
                     Al 19991014
                                         WO 1999-FR740 19990330 <--
        W: AE, AL, AT, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO,
            NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                     A1 19991008
                                         FR 1998-4121
                                                           19980402
     FR 2777017
                           20020823
     FR 2777017
                      В1
                                          CA 1999-2324931 19990330 <--
    CA 2324931
                      AA
                           19991014
     BR 9909350
                           20001212
                                          BR 1999-9350
                                                          19990330 <--
                     A1 20010117
                                         EP 1999-910463
                                                          19990330 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
             SI, FI
     JP 2002513543
                      T2
                           20020514
                                          JP 2000-542302
                                                          19990330 <--
    AU 759301
                      В2
                           20030410
                                          AU 2000-34061 20000512
     NO 2000004780 A
                           20001101
                                         NO 2000-4780
                                                          20000925 <--
                                       FR 1998-4121 A 19980402
PRIORITY APPLN. INFO.:
                                       US 1998-85845P P 19980518
                                       WO 1999-FR740 W 19990330 <--
OTHER SOURCE(S):
                       MARPAT 131:267946
    The invention concerns novel compds. useful as agents for transferring
    nucleic acids into cells. Said novel compds. are more particularly
     related to the lipopolyamine family, and comprise at least a cyclic
     amidine function. They are useful for transfecting nucleic acids of
     interest into different cell types, in vitro as well as in vivo or ex vivo
     ICM C07D233-48
     ICS C07D239-14; C12N015-87; A61K031-47; C07J041-00; C07K005-06
     3-1 (Biochemical Genetics)
     Section cross-reference(s): 23
     transfection amidine contg lipopolyamine
     Gene therapy
     Transformation, genetic
        (amidine-contg. lipopolyamines, their synthesis and use in
        transfection)
```

245738-75-4P 245738-76-5P 245738-77-6P 245738-78-7P 245738-79-8P 245738-80-1P

TΤ

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (amidine-contg. lipopolyamines, their synthesis and use in transfection)

IT 107-13-1, 2-Propenenitrile, reactions 2055-46-1, 3,4,5,6-Tetrahydro-2-pyrimidinethiol 2440-60-0, O-Methylisourea 3088-42-4 4530-20-5, Boc-Glycine 5464-11-9 17361-44-3, Ditetradecylamine 181821-44-3 191156-90-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(amidine-contg. lipopolyamines, their synthesis and use in transfection)

ΙT 20112-81-6P 175903-37-4P 204526-12-5P 204526-13-6P 204526-14-7P 245738-82-3P 245738-81-2P 245738-83-4P 245738-84-5P 216778-32-4P 245738-86-7P 245738-87-8P 245738-88-9P 245738-89-0P 245738-85-6P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(amidine-contg. lipopolyamines, their synthesis and use in transfection)

IT 245738-75-4P 245738-76-5P 245738-77-6P 245738-78-7P 245738-79-8P 245738-80-1P

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (amidine-contg. lipopolyamines, their synthesis and use in transfection)

RN 245738-75-4 HCAPLUS

CN Glycinamide, N-[3-[[4-(2-amino-5,6-dihydro-1(4H)-pyrimidinyl)butyl]amino]propyl]glycyl-N,N-dioctadecyl-(9CI) (CA INDEX NAME)

RN 245738-76-5 HCAPLUS

CN Glycinamide, N-[3-[[4-(2-amino-5,6-dihydro-1(4H)-pyrimidinyl)butyl]amino]propyl]glycyl-N,N-ditetradecyl-(9CI) (CA INDEX NAME)

$$(CH_2)_4 - NH - (CH_2)_3 - NH - CH_2 - C - NH - CH_2 - C - N - (CH_2)_{13} - Me$$

$$(CH_2)_{13} - Me$$

$$(CH_2)_{13} - Me$$

RN 245738-77-6 HCAPLUS

CN Glycinamide, N-[3-[[4-[[3-[(4,5-dihydro-1H-imidazol-2-yl)amino]propyl]amino]butyl]amino]propyl]glycyl-N-tetradecyl-N-tetradecyl-(9CI) (CA INDEX NAME)

PAGE 1-B

RN 245738-78-7 HCAPLUS
CN Glycinamide, N-[3-[bis[3-[(4,5-dihydro-1H-imidazol-2-yl)amino]propyl]amino]propyl]glycyl-N,N-ditetradecyl- (9CI) (CA INDEX NAME)

$$(CH_2)_3 - NH - CH_2 - C - NH - CH_2 - C - N - (CH_2)_{13} - Me$$

$$NH - (CH_2)_3 - NH - (CH_2)_3 - NH - NH - (CH_2)_{13} - Me$$

$$(CH_2)_{13} - Me$$

RN 245738-79-8 HCAPLUS

CN Glycinamide, N-[3-[[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]propyl]amin o]propyl]glycyl-N-tetradecyl-N-tetradecyl- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

— Ме

RN

245738-80-1 HCAPLUS Glycinamide, N-[3-[(3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]propyl]aminCN o]propyl]glycyl-N-octadecyl-N-octadecyl- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

--- Ме

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT